

THE HAWAIIAN SPECIES OF *OPEAS*.

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*Read 8th April, 1904.*

RECENTLY, when cataloguing the Hawaiian fauna,<sup>1</sup> I admitted three species of this genus, namely, *O. junceus* (Gld.), *O. Prestoni*, Sykes, and *O. pyrgiscus* (Pfr.); also noting the manuscript name of *O. striolata*, Pease. Further material, collected in Hawaii by Professor Henshaw, has been submitted to me by him, and I am now enabled to give some additional details. Figures are also given in order that the forms discussed may be the more readily identified.

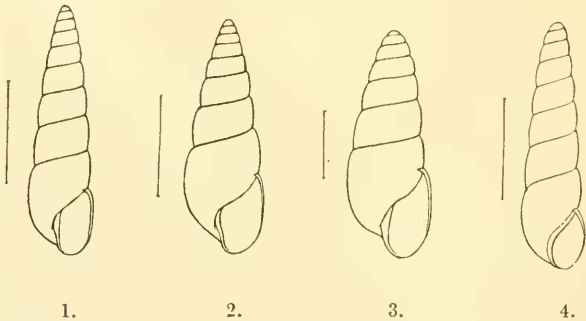
1. *OPEAS JUNCEUS* (Gould). (Fig. 1.)

*Hab.*—Hawaiian Islands (Gould); all the islands (Baldwin); Oahu, Waianae Mountains (Perkins); Hawaii, Kohala, Kau (Henshaw).

2. *OPEAS HENSHAWI*, n.sp. (Fig. 2.)

Shell subperforate, turreted, somewhat solid, with closely-set, well-marked, curved, longitudinal striæ; light-yellowish horn-colour. Spire well drawn out, suture well-marked, but the whorls not so shouldered as in *O. junceus*. Whorls  $8\frac{1}{2}$ , plano-convex, the last whorl inflated, and measuring about half of the total length of the shell, somewhat compressed at the base. Mouth somewhat axe-shaped, the columellar margin reflexed and rather sinuous above. Alt. 12·5 mm.; diam. max. 4 mm.

*Hab.*—Hawaii, Hilo (Henshaw).



The salient features of this form are its yellow colour, the well-marked, curved striæ, the size and inflation of the last whorl, and the slightly sinuous columellar margin, which bends to the left above and

<sup>1</sup> "Fauna Hawaiënsis," vol. ii, p. 383.

is not vertical. I have seen about twenty specimens, a few of which are slightly narrower in proportion to the length. This may, very possibly, be the manuscript *O. striolata* of Pease.

3. *OPEAS PRESTONI*, n.var. *HAWAIIENSIS*. (Fig. 3.)

*Hab.*—Hawaii, Kailua, Mauna Loa at 1,500 feet (Perkins); Hawaii, Hilo (Henshaw).

In the "Fauna Hawaiiensis" I referred this shell to the species described by me from Ceylon. After a careful re-examination of a good series of specimens from both Hawaii and Ceylon, undertaken at the suggestion of Professor Henshaw, there appear to be certain constant differences between the shells collected in the two localities. Whether these be of specific value or not it is very hard to say, bearing in mind the abnormal distribution of the genus, but they seem worthy of, at least, a varietal name.

The Hawaiian form is more cylindrical, i.e. the earlier whorls increase more rapidly and the later ones less so, the colour is pale yellowish white, whereas the Ceylon shell is a light horn-colour, the texture of the shell is slightly thinner and more transparent, and the specimens that I have seen are, on the average, smaller in size.

4. *OPEAS PYRGISCUS* (Pfeiffer). (Fig. 4.)

I have not as yet seen anything that agrees exactly with the series in the British Museum. Of the shells sent by Mr. Henshaw specimens from Kohala, Kau, approach it most nearly; also some specimens collected by Mr. Thwing in an extinct crater, Kona, appear to be closely related. Final determination must be reserved, as both sets of shells are immature.

All figures are taken from specimens in my own collection, except Fig. 4, which is a copy of that given by Pfeiffer.

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